Reply to Office Action of May 1, 2007

AMENDMENTS TO THE SPECIFICATION

Docket No.: 0760-0347PUS1

IN THE SPECIFICATION:

Please amend the specification as follows:

At page 1, line 25:

Replace:

"The present inventor intensively studied to discover that by carrying out the gene

therapy with a vector in which a fusion protein of the desired protein which should be

produced in the body by the gene therapy and a glucagon C-terminal side 19-29 amino

acid peptide, the blood level of the desired protein may be measured with high sensitivity

using the glucagon peptide as a label, and that undesired physiological action or induction

of immunological reaction due to the label peptide scarcely occurs, thereby completing

the present invention."

With

-- The present inventor intensively studied to discover that by carrying out the gene

therapy with a vector in which a fusion protein of the desired protein which should be

produced in the body by the gene therapy and a peptide that has the amino acid sequence

shown in SEQ ID NO: 1, the blood level of the desired protein may be measured with

high sensitivity using the glucagon peptide as a label, and that undesired physiological

action or induction of immunological reaction due to the label peptide scarcely occurs,

thereby completing the present invention .-

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At page 2, line 5:

Replace:

"That is, the present invention provides a vector for gene therapy comprising an

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expression vector for mammalian cells and a nucleic acid coding for a fusion protein of

glucagon C-terminal side 19-29 amino acid peptide region and a desired protein region

which should be produced in the body, which vector can produce the fusion protein in the

mammalian cells."

With:

-- That is, the present invention provides a vector for gene therapy comprising an

expression vector for mammalian cells and a nucleic acid coding for a fusion protein of a

peptide that has the amino acid sequence shown in SEQ ID NO: 1 and a desired protein

region which should be produced in the body, which vector can produce the fusion

protein in the mammalian cells .--

At page 2, line 15:

Replace:

"The present invention still further provides a method for quantifying a desired protein

produced in the body or in cultured cells by expression of the vector for gene therapy,

comprising quantifying, by immunoassay, the glucagon C-terminal side 19-29 amino acid

peptide region in a test sample collected from a mammal or cultured mammalian cells to

which the vector for gene therapy according to the present invention was administered."

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With:

-- The present invention still further provides a method for quantifying a desired protein

produced in the body or in cultured cells by expression of the vector for gene therapy,

comprising quantifying, by immunoassay, a peptide that has the amino acid sequence

shown in SEO ID NO: 1 in a test sample collected from a mammal or cultured

mammalian cells to which the vector for gene therapy according to the present invention

was administered.--

At page 2, line 20:

Replace:

"The present invention still further provides a label for labeling a desired protein

produced by expression of an externally administered expression vector in the body of a

mammal or in cultured mammalian cells, consisting essentially of glucagon C-terminal

side 19-29 amino acid peptide."

With:

"The present invention still further provides a label for labeling a desired protein

produced by expression of an externally administered expression vector in the body of a

mammal or in cultured mammalian cells, consisting essentially of a peptide that has the

amino acid sequence shown in SEO ID NO: 1 .--

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At page 2, line 24:

Replace:

"The present invention still further provides a method for labeling a protein produced in

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the body or in cultured cells, comprising labeling a desired protein produced in the body

or in cultured cells with glucagon C-terminal side 19-29 amino acid peptide by

expressing the desired protein produced by expression of an externally administered

expression vector in the body of a mammal or in cultured mammalian cells, as a fusion

protein with the glucagon C-terminal side 19-29 amino acid peptide as a label."

With:

"The present invention still further provides a method for labeling a protein produced in

the body or in cultured cells, comprising labeling a desired protein produced in the body

or in cultured cells with a peptide that has the amino acid sequence shown in SEQ ID

NO: 1 by expressing the desired protein produced by expression of an externally

administered expression vector in the body of a mammal or in cultured mammalian cells.

as a fusion protein with the a peptide that has the amino acid sequence shown in SEQ ID

NO: 1 as a label."

At page 3, line 3:

Replace:

"The present invention still further provides a use of glucagon C-terminal side 19-29

amino acid peptide as a label for a desired protein produced by expression of an

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externally administered expression vector in the body of a mammal or in cultured

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mammalian cells."

With:

"The present invention still further provides a use of a peptide that has the amino acid

sequence shown in SEQ ID NO: 1 as a label for a desired protein produced by expression

of an externally administered expression vector in the body of a mammal or in cultured

mammalian cells."

At page 3, lines 9:

Replace:

"Since the glucagon C-terminal side 19-29 itself does not have a physiological action and

is well conserved in various mammals, it does not substantially induce an immunological

reaction while it can be quantified by immunoassay with high sensitivity using a

commercially available immunoassay kit."

With:

--Since the peptide that has the amino acid sequence shown in SEO ID NO: litself does

not have a physiological action and is well conserved in various mammals, it does not

substantially induce an immunological reaction while it can be quantified by

immunoassay with high sensitivity using a commercially available immunoassay kit .--

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At page 5, line 18:

Replace:

"The "glucagon C-terminal side 19-29 amino acid peptide" which is expressed by the

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vector according to the present invention in the form of a fusion protein, means the

peptide consisting essentially of totally 11 amino acids located from the 19th to 29th

amino acid counted from the C-terminal of glucagon."

With:

--The "peptide that has the amino acid sequence shown in SEQ ID NO: 1" which is

expressed by the vector according to the present invention in the form of a fusion protein,

means the peptide consisting essentially of totally 11 amino acids located from the 19th

to 29th amino acid counted from the C-terminal of glucagon .--

At page 5, line 23:

Replace:

"Since the "glucagon C-terminal side 19-29 amino acid peptide" is used as a label of the

desired protein, the peptide may be hereinafter referred to as "glucagon-originated label

peptide" for convenience."

With:

--Since the "a peptide that has the amino acid sequence shown in SEO ID NO: 1" is used

as a label of the desired protein, the peptide may be hereinafter referred to as "glucagon-

originated label peptide" for convenience .--